A number of features are described herein with respect to embodiments of the invention; it will be appreciated that features described with respect to a given embodiment also may be employed in connection with other embodiments.

The invention comprises the features described herein, including the description, the annexed drawings, and the claims, which set forth in detail certain illustrative embodiments. These embodiments are indicative, however, of but a few of the various ways in which the principles of the invention may be employed.

It will be appreciated that the features and principles of the invention may be used in systems other than those disclosed herein for PS-OCT and the like.

Although the invention is shown and described with respect to illustrative embodiments, it is evident that equivalents and modifications will occur to those persons skilled in the art upon the reading and understanding hereof. The present invention includes all such equivalents and modifications and is limited only by the scope of the claims.

Brief Description of the Drawings

In the annexed drawings:

Fig. 1 is a schematic illustration of a polarization-sensitive optical coherence tomography system;

Fig. 2(a) is a graphical representation of measured vs. actual retardation in a calibrated test plate used in the system of the invention;

Fig. 2 (b) is a graphical representation of measured vs. predicted fast axis in a calibration test sample used in the system of the invention; and

Fig. 3(a) is a polarization-sensitive OCT image of ex vivo Xenopus laevis leg muscle, the left image representing optical power reflectivity image plotted on a logarithmic scale; and

Fig. 3(b) is a polarization-sensitive OCT image of ex vivo Xenopus laevis leg muscle representing combined retardation/optical power presented with a hue-saturation value (HSV) color scale.

Description